

IN THE CLAIMS:

Please cancel Claims 6, 16, and 26, without prejudice to or disclaimer of the subject matter recited therein. Please amend Claims 1, 4, 5, 7-11, 14, 15, 17, and 19-25, and add new Claims 27-43, as follows.

1. (Currently Amended) A printing apparatus to which an expendable unit, having a memory for storing and holding information that ~~pertains to~~ concerns a recording agent and a use state, ~~and a~~ of the recording agent used in a print process, is detachably attached, comprising:

memory access means for ~~making read~~ reading from and ~~write~~ writing to the memory in the expendable unit; and

setting means for setting inhibition/permission of ~~data write~~ writing with respect to ~~an address space~~ the data which is stored in the memory which has a data area storing the data that concerns the recording agent and the use state of the recording agent and a setting area setting inhibition/permission of writing with respect to the data area;

wherein said setting means sets, into the setting area, data for inhibiting or permitting of writing with respect to the data area.

2. (Original) The apparatus according to claim 1, wherein said memory access means and the memory are connected via a serial communication line.

3. (Original) The apparatus according to claim 1, wherein said memory access means and the memory are connected via non-contact communication means.

4. (Currently Amended) The apparatus according to claim 1, further comprising:
detection means for detecting an amount of an expendable agent in the expendable unit; and

~~expendable agent~~ update means for writing the expendable agent amount detected by said detection means ~~at a predetermined address position~~ in the data area of the memory via said memory access means, and

wherein said setting means sets to inhibit ~~write~~ writing to the ~~predetermined address position~~ data area when said detection means detects that the remaining amount of the expendable agent becomes ~~not more~~ less than a predetermined amount.

5. (Currently Amended) The apparatus according to claim ~~1~~ 4, wherein one or a plurality of predetermined amounts of the expendable agent are determined in advance, when each of the predetermined amounts has been reached, data indicating that the predetermined amount has been reached is written in ~~an address~~ the data area corresponding to that predetermined amount at a different timing, and ~~write~~ writing to the ~~address~~ data area is set to be inhibited.

6. (Cancel)

7. (Currently Amended) A printing apparatus comprising:

detaching/attaching means for detaching or attaching an expendable unit having a memory capable of setting a locking state for inhibiting data writing with respect to at least a predetermined area in the memory;

detection means for detecting a state of the expendable unit;

write means for writing a result detected by said detection means to the memory which has a setting area setting inhibition/permission of writing with respect to the predetermined area; and

locking state control means for controlling the locking state of the memory by setting data into the setting area, on the basis of the ~~result~~ status of said expendable unit detected by detection means.

8. (Currently Amended) The apparatus according to claim 7, wherein the data communication between said printer and said expendable unit is made by wireless transmission.

9. (Currently Amended) The apparatus according to claim 7, wherein said detection means detects an amount of an expendable agent in the expendable unit.

10. (Currently Amended) The apparatus according to claim 7, wherein, when the amount of the expendable agent in the expendable unit detected by said detection means reaches a predetermined amount or one of a plurality of predetermined amounts ~~said~~

~~write means~~, said write means writes data, indicating that the amount of expendable agent has reached ~~to~~ the predetermined amounts, in said predetermined area of said memory, and said lock state control means sets data into said setting area ~~controls the memory~~ so that the predetermined area of the memory becomes locked ~~state~~.

11. (Currently Amended) A method of controlling a printing apparatus to which an expendable unit, having a memory for storing and holding information that ~~pertains to~~ concerns a recording agent and a use state ~~and a~~ of the recording agent used in a print process, is detachably attached, comprising:

the memory access step of ~~making read~~ reading from and ~~write~~ writing to the memory in the expendable unit; and

the setting step of setting inhibition/permission of ~~data-write~~ writing with respect to ~~an a~~ a data address space area in the memory by setting, into a setting area in the memory,
data for setting inhibition/permission of writing with respect to the data area.

12. (Original) The method according to claim 11, wherein data communication with said memory in said memory access step is performed by using a serial communication line.

13. (Original) The method according to claim 11, wherein data communication with said memory in said memory access step is performed in non-contact manner with said memory.

14. (Currently Amended) The method according to claim 11, further comprising the detection step of detecting ~~a mount~~ an amount of expendable agent in said expendable unit,

wherein, in said memory access step, the amount of the expendable agent in said expendable unit is written to a ~~predetermined address~~ the data area of said memory,

and in said setting step, when the amount of the expendable agent detected in said detection step is less than a predetermined amount, ~~write writing~~ to the ~~predetermined address~~ data area of said memory is set to be inhibited by setting data into the setting area.

15. (Currently Amended) The method according to claim ~~11~~ 14, wherein one or a plurality of predetermined amounts of the expendable agent are determined in advance, when each of the predetermined amounts has been reached, data indicating that the predetermined amount has been reached is written in ~~an~~ the data ~~address~~ area corresponding to that predetermined amount at a different timing, and ~~write writing~~ to the data ~~address~~ area is set to be inhibited.

16. (Cancel)

17. (Currently Amended) A method of controlling a printing apparatus having detaching/attaching means for detaching or attaching an expendable unit having a memory capable of setting a locking state for inhibiting data writing with respect to a predetermined area in the memory, comprising the steps of:

the detection step of detecting a state of the expendable unit;
the write step of writing the result detected in said detection step to the memory;
and
the locking state control step of controlling a locking state of the memory by
setting, into a setting area of the memory, data for setting the locking state of the
predetermined area of the memory, on the basis of the status of the expendable unit
detected in said detection step.

18. (Original) The method according to claim 17, wherein data communication between the printing apparatus and the memory is made by wireless.

19. (Currently Amended) The method according to claim 17, wherein, in said detection step, an expendable agent in the expendable unit is detected.

20. (Currently Amended) The method according to claim 17, wherein, when the amount of the expendable agent in the expendable unit detected in said detection step reaches a predetermined amount or one of a plurality of predetermined amounts, data indicating that the amount of expendable agent has reached ~~to~~ the predetermined amount is written in ~~an~~ the predetermined area of said memory in said write step, and, in said lock state control step, said memory is controlled so that the predetermined area of the memory becomes locked ~~state~~.

21. (Currently Amended) An expendable unit which has a an expendable recording agent used in a print process and is detachable from a printing apparatus, comprising:

communication means for communicating with the printing apparatus in a condition that ~~when~~ said expendable unit is attached to the printing apparatus;

a memory for storing and holding information that ~~pertains to~~ concerns the expendable unit ~~a use state~~, and writing and reading out data via said communication means when said expendable unit is attached to the printing apparatus, said memory having a data area storing data that concerns the recording unit and a setting area setting inhibition/permission of writing with respect to the data area; and

means for receiving information indicating permission/inhibition of ~~write~~ writing to said memory in units of addresses via said communication means, and locking ~~write~~ writing to said memory.

22. (Currently Amended) The expendable unit according to claim 21, wherein said communication means is means for communicating with the printer via a serial communication line.

23. (Currently Amended) The expandable unit according to claim 21, wherein said communication means is means for communicating with the printer by wireless transmission.

24. (Currently Amended) The expendable unit according to claim 21, wherein said memory has ~~an address area for storing~~ the data area of said memory stores information concerning an amount of expendable agent in the expendable unit,

wherein, when the amount of the expendable agent in the expendable unit is less than a predetermined amount or one of a plurality of predetermined amounts, ~~write~~ writing to the ~~address~~ data area of said memory is set to be inhibited.

25. (Currently Amended) The expendable unit according to claim 21, wherein said memory has address areas corresponding to a plurality of predetermined amounts of expendable agent, when the amount of expendable agent in the expendable unit reaches a predetermined amount, data indicating that the amount of expendable agent reaches the predetermined amount is written to ~~an address~~ the data area corresponding to the predetermined amount, and ~~write~~ writing to the written ~~address~~ data area is set to be inhibited.

26. (Cancel)

27. (New) The apparatus according to claim 1, wherein said agent is toner and said expendable unit is a toner cartridge.

28. (New) The apparatus according to claim 1, wherein the apparatus is an electrophotographic-type image forming apparatus.

29. (New) The apparatus according to claim 7, wherein said agent is toner and said expendable unit is a toner cartridge.

30. (New) The apparatus according to claim 7, wherein the apparatus is an electrophotographic-type image forming apparatus.

31. (New) The method according to claim 11, wherein said agent is toner and said expendable unit is a toner cartridge.

32. (New) The method according to claim 11, wherein the apparatus is an electrophotographic-type image forming apparatus.

33. (New) The method according to claim 17, wherein said agent is toner and said expendable unit is a toner cartridge.

34. (New) The method according to claim 17, wherein the apparatus is an electrophotographic-type image forming apparatus.

35. (New) The expendable according to claim 21, wherein said agent is toner and said expendable unit is a toner cartridge.

36. (New) The expendable according to claim 21, wherein the apparatus is an electrophotographic-type image forming apparatus.

37. (New) A memory unit provided to an expendable unit which can be detachably attached to a printing apparatus, said memory unit comprising:

a first memory area to store and hold information that concerns the expendable unit;
and

a second memory area to store data for determining inhibition/permission of writing with respect to said first memory area.

38. (New) The memory unit according to claim 37, further comprising a third memory area to store data determining inhibition/permission of with respect to said second memory area.

39. (New) The memory unit according to claim 37, wherein said second memory area is a specific address area or a specific bit area of the memory unit.

40. (New) The memory unit according to claim 38, wherein said third memory area is a specific address area of the memory unit.

41. (New) The memory unit according to claim 37, wherein said expendable unit has an expendable agent used in a print process, and the information concerning the expendable unit is information related to a remaining amount of the expendable agent.

42. (New) The memory unit according to claim 37, wherein the information concerning the expendable unit is information concerning whether or not the expendable unit is new.

43. (New) The memory unit according to claim 37, wherein the information concerning the expendable unit is date information concerning when the expendable unit has been attached to the printing apparatus for the first time.